

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 10/603,934
Attorney Docket No. Q76224

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A display panel comprising:
 - a first substrate with transparent display electrodes disposed for forming display cells within a display area;
 - a second substrate disposed separately from and opposite to the first substrate and formed with partition walls for forming sections of the display cells within the display area;
 - a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and
 - a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,
 - wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the transparent electrodes and the partition walls can directly be recognized, [[and]]
 - wherein, when the transparent electrodes and the partition walls are properly positioned, a combination of the first positioning mark and the second positioning mark forms a predetermined figure, and
 - wherein the first positioning mark and the second positioning mark do not overlap each other when the transparent electrodes and the partition walls are properly positioned.

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2. (original): A display panel according to claim 1,

wherein the first positioning mark and the second positioning mark are disposed respectively at four corner positions of the first substrate and the second substrate in a manner opposite to each other.

3. (canceled).

4. (currently amended): A display panel according to claim 1,

wherein the first positioning mark and the second positioning mark have a common center of gravity or a common center when the transparent electrodes and the partition walls are properly positioned, and

~~wherein the first positioning mark and the second positioning mark do not overlap each other when the transparent electrodes and the partition walls are properly positioned.~~

5. (currently amended): A display panel comprising:

a first substrate with transparent display electrodes disposed for forming display cells within a display area;

a second substrate disposed separately from and opposite to the first substrate and formed with partition walls for forming sections of the display cells within the display area;

a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and

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a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,

wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the transparent electrodes and the partition walls can directly be recognized, [[and]]

wherein the first positioning marks are formed in the same layer as a layer in which the transparent electrodes are formed, whereas the second positioning marks are formed in the same layer as a layer in which the partition walls are formed, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the transparent electrodes and the partition walls are properly positioned.

6. (original): A display panel according to claim 1,

wherein the first positioning marks are formed at the same step as a step of forming the transparent electrodes, whereas the second positioning marks are formed at the same step as a step of forming the partition walls.

7. (currently amended): A display panel comprising:

a first substrate with transparent display electrodes disposed for forming display cells within a display area;

a second substrate disposed separately from and opposite to the first substrate and formed with partition walls for forming sections of the display cells within the display area;

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a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and

a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,

wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the transparent electrodes and the partition walls can directly be recognized, [[and]]

wherein the first positioning marks are formed of the same material as the material of the transparent electrodes, whereas the second positioning marks are formed of the same material as the material of the partition walls, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the transparent electrodes and the partition walls are properly positioned.

8. (currently amended): A display panel comprising:

a first substrate with first partition walls disposed for forming sections of transparent display electrodes for forming display cells and the display cells in an at least first direction;

a second substrate disposed separately from and opposite to the first substrate with second partition walls disposed for forming sections of the display cells in the at least first direction within a display area;

a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and

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a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,

wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the first partition walls and the second partition walls can directly be recognized, [[and]]

wherein, when the first partition walls and the second partition walls are properly positioned, a combination of the first positioning mark and the second positioning mark forms a predetermined figure, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the first partition walls and the second partition walls are properly positioned.

9. (original): A display panel according to claim 8,

wherein the first positioning mark and the second positioning mark are disposed respectively at four corner positions of the first substrate and the second substrate in a manner opposite to each other.

10. (canceled).

11. (currently amended): A display panel according to claim 8,

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wherein the first positioning mark and the second positioning mark have a common center of gravity or a common center when the first partition walls and the second partition walls are properly positioned, and

~~wherein the first positioning mark and the second positioning mark do not overlap each other when the first partition walls and the second partition walls are properly positioned.~~

12. (currently amended): A display panel comprising:

a first substrate with first partition walls disposed for forming sections of transparent display electrodes for forming display cells and the display cells in an at least first direction; a second substrate disposed separately from and opposite to the first substrate with second partition walls disposed for forming sections of the display cells in the at least first direction within a display area;

a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and

a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,

wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the first partition walls and the second partition walls can directly be recognized, [[and]]

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wherein the first positioning marks are formed in the same layer as a layer in which the first partition walls are formed, whereas the second positioning marks are formed in the same layer as a layer in which the second partition walls are formed, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the first partition walls and the second partition walls are properly positioned.

13. (previously presented): A display panel according to claim 8, wherein the first positioning marks are formed at the same step as a step of forming the first partition walls, whereas the second positioning marks are formed at the same step as a step of forming the second partition walls.

14. (currently amended): A display panel comprising:
a first substrate with first partition walls disposed for forming sections of transparent display electrodes for forming display cells and the display cells in an at least first direction;
a second substrate disposed separately from and opposite to the first substrate with second partition walls disposed for forming sections of the display cells in the at least first direction within a display area;
a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and
a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,

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wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the first partition walls and the second partition walls can directly be recognized, [[and]]

wherein the first positioning marks are formed of the same material as the material of the first partition walls, whereas the second positioning marks are formed of the same material as the material of the second partition walls, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the first partition walls and the second partition walls are properly positioned.

15. (currently amended): A method of producing a display panel comprising:
putting a first substrate and a second substrate on top of each other, the first substrate being formed with transparent display electrodes disposed for forming display cells within a display area, the second substrate being formed with partition walls for forming sections of the display cells within the display area; and

forming pairs of first positioning marks and second positioning marks for use in verifying the positioning of the transparent electrodes and the partition walls in at least two or more positions outside the display areas of the first substrate and the second substrate before the step of putting the substrates on top of each other,

wherein proper positioning of the transparent electrodes and the partition walls is verified when combinations of the pairs of the first positioning marks and the second positioning marks form predetermined figures, and

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wherein the first positioning marks and the second positioning marks do not overlap each other when the transparent electrodes and the partition walls are properly positioned.

16. (original): A method of producing a display panel according to claim 15 further comprising:

individually measuring the coordinates of the positions of the first positioning marks and the second positioning marks before the step of putting the substrates on top of each other and relatively moving the first substrate and the second substrate so that deviation in position corresponding to the coordinates thus measured is adjusted.

17. (currently amended): A method of producing a display panel comprising:
putting a first substrate and a second substrate on top of each other, the first substrate being formed with first partition walls disposed for forming sections of transparent display electrodes for forming display cells within the display area and the display cells in an at least first direction, the second substrate being formed with second partition walls disposed for forming sections of the display cells within the display area; and

forming pairs of first positioning marks and second positioning marks for use in verifying the positioning of the first partition walls and the second partition walls in at least two positions outside the display areas of the first substrate and the second substrate before the step of putting the substrates on top of each other,

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wherein proper positioning of the first partition walls and the second partition walls is verified when combinations of the pairs of the first positioning marks and the second positioning marks form predetermined figures, and

wherein the first positioning marks and the second positioning marks do not overlap each other when the first partition walls and the second partition walls are properly positioned.

18. (original): A method of producing a display panel according to claim 17 further comprising:

individually measuring the coordinates of the positions of the first positioning marks and the second positioning marks before the step of putting the substrates on top of each other and relatively moving the first substrate and the second substrate so that deviation in position corresponding to the coordinates thus measured is adjusted.

19. (currently amended): A display panel comprising:
a first substrate with transparent display electrodes disposed for forming display cells within a display area;

a second substrate disposed separately from and opposite to the first substrate and formed with partition walls for forming sections of the display cells within the display area;

a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and

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a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,

wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the transparent electrodes and the partition walls can directly be recognized,

wherein the first positioning mark and the second positioning mark have a common center ~~of gravity or a common center~~ when the transparent electrodes and the partition walls are properly positioned, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the transparent electrodes and the partition walls are properly positioned.

20. (currently amended): A display panel comprising:

a first substrate with first partition walls disposed for forming sections of transparent display electrodes for forming display cells and the display cells in an at least first direction; a second substrate disposed separately from and opposite to the first substrate with second partition walls disposed for forming sections of the display cells in the at least first direction within a display area;

a first positioning mark disposed in at least two or more positions outside the display area of the first substrate; and

a second positioning mark disposed in at least two or more positions outside the display area of the second substrate,

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wherein the first positioning marks and the second positioning marks are disposed so that the positional relation between the first partition walls and the second partition walls can directly be recognized,

wherein the first positioning mark and the second positioning mark have a common center ~~of gravity or a common center~~ when the first partition walls and the second partition walls are properly positioned, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the first partition walls and the second partition walls are properly positioned.

21. (currently amended): A display panel comprising:
a first substrate for forming display cells within a display area, wherein a first positioning mark is disposed on the first substrate.

a second substrate for forming the display cells within the display area, wherein the second substrate is disposed opposite to the first substrate and wherein a second positioning mark is formed on the second substrate;

wherein, when the first substrate and the second substrate are properly positioned, a combination of the first positioning mark and the second positioning mark forms a predetermined figure, and

wherein the first positioning mark and the second positioning mark do not overlap each other when the first substrate and the second substrate are properly positioned.

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22. (previously presented): The display panel as claimed in claim 21, wherein the first positioning mark is formed outside the display area of the first substrate, and wherein the second positioning mark is formed outside the display area of the second substrate.

23. (previously presented): The display panel as claimed in claim 21, wherein the first substrate comprises transparent electrodes for forming display cells within the display area, and

wherein the second substrate comprises partitioning walls for sectioning the display cells within the display area.

24. (currently amended): A display panel according to claim 21, wherein the first positioning mark and the second positioning mark have a common center ~~of gravity or a common center~~ when the first substrate and the second substrate are properly positioned.

25. (canceled).

26. (currently amended): A display panel according to claim 23, wherein the first positioning mark and the second positioning mark have a common center ~~of gravity or a common center~~ when the transparent electrodes and the partition walls are properly positioned.

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27. (previously presented): A display panel according to claim 23, wherein the first positioning mark and the second positioning mark do not overlap each other when the transparent electrodes and the partition walls are properly positioned.

28. (previously presented): A display panel according to claim 23, wherein the first positioning mark is formed in the same layer as a layer in which the transparent electrodes are formed.

29. (previously presented): A display panel according to claim 23, wherein the second positioning mark is formed in the same layer as a layer in which the partition walls are formed.

30. (previously presented): A display panel according to claim 23, wherein the first positioning mark is formed of the same material as the material of the transparent electrodes.

31. (previously presented): A display panel according to claim 23, wherein the second positioning mark is formed of the same material as the material of the partition walls.

32. (previously presented): The display panel as claimed in claim 21, wherein the first substrate comprises first partition walls for sectioning transparent display electrodes for forming display cells within the display area, and

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wherein the second substrate comprises second partitioning walls for sectioning the display cells within the display area.

33. (currently amended): A display panel according to claim 32, wherein the first positioning mark and the second positioning mark have a common center ~~of gravity or a common center~~ when the first partition walls and the second partition walls are properly positioned.

34. (previously presented): A display panel according to claim 32, wherein the first positioning mark and the second positioning mark do not overlap each other when the first partition walls and the second partition walls are properly positioned.

35. (previously presented): A display panel according to claim 32, wherein the first positioning mark is formed in the same layer as a layer in which the first partition walls are formed.

36. (previously presented): A display panel according to claim 32, wherein the second positioning mark is formed in the same layer as a layer in which the second partition walls are formed.

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37. (previously presented): A display panel according to claim 32, wherein the first positioning mark is formed of the same material as the material of the first partition walls.

38. (previously presented): A display panel according to claim 32, wherein the second positioning mark is formed of the same material of the second partition walls.